CLAIMS

What is claimed is:

1. A dual-inlet gear pump comprising:

a drive gear associated with a drive shaft to be driven, said drive gear having gear teeth engaging gear teeth on a second driven gear; and

a first inlet for delivering a fluid to be pumped to said drive gear, and a second inlet, separate from said first inlet, for delivering a fluid to be pumped to said driven gear, said first inlet to be communicated to a first source of fluid, and said second inlet to be communicated to a second source of fluid, said first source of fluid having a higher expected flow rate than said second source.

2. A dual-inlet gear pump as set forth in Claim 1, wherein the dual-inlet gear pump is part of an oil scavenging system for a jet engine, and said first and second sources of fluid provide an air/oil mixture to said first and second inlets.

3. A dual-inlet gear pump as set forth in claim 1, wherein consecutive teeth of said driven gear sealing on a housing surface as said teeth approach a port for communicating with said second inlet, said surface being sufficiently long such that adjacent ones of said teeth seal on said surface for at least a period of time as they approach said port.

4. A dual-inlet gear pump as set forth in claim 1, wherein said dual-inlet gear pump is part of an oil scavenging system for a gearbox, and said first and second sources of fluid provide an air/oil mixture to said first and second inlets from distinct gearbox locations.

5. A dual-inlet gear pump as set forth in claim 4, wherein said distinct gearbox locations are two distinct gearboxes.

6. A method of providing a gear pump comprising the steps of:

(1) providing a drive gear attached to a source of drive, said drive gear being provided with teeth at an outer periphery, said teeth on said drive gear engaging mating teeth on a driven gear such that rotation of said drive gear causes rotation of said driven gear;

(2) providing a first inlet for providing a fluid to said drive gear and a separate second inlet for providing a fluid to said driven gear; and

(3) connecting said first and second inlets to a first and second source of fluid, respectively, said first source of fluid having a higher expected flow rate than said second source of fluid.

7. A method as set forth in claim 6, wherein said first and second sources of fluid are components on a jet engine.

8. A method as set forth in claim 6, wherein said first and second sources of fluid deliver an air/oil mixture.

9. A lubricant scavenging system for a jet engine comprising:

a dual-inlet gear pump including a drive gear being driven to rotate by a jet engine drive, said drive gear having teeth at an outer periphery engaging teeth on a driven gear such that rotation of said drive gear causes rotation of said driven gear;

a first fluid supply communicating with a first component on the jet engine and a second fluid supply communicating with a second component on the jet engine; and

a first inlet communicating said first fluid supply to said drive gear and a second inlet communicating said second fluid supply to said driven gear, said first and second inlets being separate from each other, and said first component having a higher expected flow rate than said second component.

10. A dual-inlet gear pump as set forth in claim 9, wherein consecutive teeth of said driven gear sealing on a housing surface as said teeth approach a port for communicating with said second inlet, said surface being sufficiently long such that adjacent ones of said teeth seal on said surface for at least a period of time as they approach said port.